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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,907	09/19/2003	James F. Munro	4484/101	8525

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EXAMINER

GARBER, CHARLES D

ART UNIT PAPER NUMBER

2856

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/666,907

Applicant(s)

MUNRO, JAMES F.

Examiner

Charles D. Garber

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-16, 25-27 and 30 is/are rejected.
- 7) ☒ Claim(s) 5-12, 17-24, 28 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/12/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 13-16, 25-27, 30 rejected under 35 U.S.C. 102(b) as being anticipated by Hines et al. (US Patent 5,933,224).

Regarding claims 1, 2, 3, 13, 14, 16, 25, 26, 27, distant measurement apparatus 100 is shown in figure 2 and 3 as a housing with at least one surface including at least one switch (button 110) along the one surface of the housing (upper surface as shown in figure 1). The switch has an inactivated position (un-depressed) and an activated position (depressed) when pressed against an origination object. The activated position of the switch effectively identifies the surface as a reference plane with respect to the origination object. In other words, the distance measured by the device is proximate some location on the plane defined by the upper surface and that location relative to the plane will be the same in all measurements.

It should be noted that Examiner considers Applicant may be attempting to define the switch location in a reference plane that it is orthogonal to the measurement direction and coincident with as solid surface on the device but has not done so in the language of the claim, such as with surfaces 26(1) and 26(2) in the figures of the

Art Unit: 2856

disclosure. Language that clearly defined the surface in an equivalent manner would read over the Hines reference.

Electronic unit 122 is an energy system in the housing, the energy system transmits energy towards a target (see "Light Transmitter Unit" item 224 of figure 7) when the switch is in an activated position and receives at least a portion of the energy which is reflected back from the target (see "Photo Diode Unit" item 226 of figure 7). "Light" is considered equivalent to the electromagnetic energy of the instant invention alternative.

Microprocessor 212 is a distance computation system coupled to the energy system as shown in figure 7. The microprocessor uses the received portion of the energy which is reflected back and an inherent assumption of the identification of the surface reference plane (in other words, predetermined value of "offset" that in part accounts for where the device housing is located with respect to the measurement components) to determine a distance from the origination object to the target (column 17 line 51 to column 18 line 18).

As for claims 4, 15, 30, the device uses a capacitor voltage corresponding to the time of flight of the light beam from the transmitter to the receiver to determine the distance (abstract). Zero voltage corresponds to a zero start time.

***Allowable Subject Matter***

Claims 5-12, 17-24 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2856

,The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 5 and 17, Kirkeby et al. (US Patent 5,471,042) and Allen et al. (US Patent Application 2003/0004729) teach activation buttons on opposite sides of a housing. Kirdeby for convenience by both right and left handed operators (claim 11, column 1 lines 57-60). Allen so that the device may be "readily activated by the fingers or palm".

Neither reference though teaches the surface on which the button is located serving as a reference location for computing a proper distance as in the instant invention.

Claims 6-12 and 18-24 depending from allowable claims 5 or 17 are allowable for the same reason.

As for claim 28, Stevens (US Patent 5,082,276) teaches a flush or recess button to activate a measuring device but the button is flush before its depressed which is not the case in the instant invention.

As for claim 29, the prior art does not disclose or suggest an "L" shaped structure slidably mounted on another surface as particularly claimed in the instant invention.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2856

The additional references cited on the accompanying form PTO-892 though not cited above are provided to indicate other prior art distance measuring devices which include one or more features or limitations in common with the instant invention.

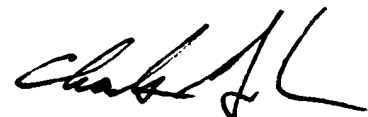
Amir (US Patent 4,882,849) in particular teaches an activation button activated by a reference surface from which a measurement is made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 6:30 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdg

  
**CHARLES GARBER**  
**PRIMARY EXAMINER**